

## AMENDMENT

### Amendments to the Claims

Please replace all prior versions and listings of claims with the following listing of claims.

#### LISTING OF CLAIMS:

1. **(Currently Amended)** A method for automatically determining at least one modal value of non-numeric data, the method comprising comprises:  
selecting a data subset from a dataset, the data subset comprising at least a portion of the dataset and including at least one non-numeric value; ~~and~~  
automatically determining at least one modal value based on the selected data subset; and  
outputting the at least one modal value.
2. **(Original)** The method of Claim 1, wherein selecting the data subset from the dataset comprises querying a database.
3. **(Original)** The method of Claim 1, each value of the data subset comprising one of the following data types:  
float;  
integer;  
currency;  
date;  
decimal; or  
string.
4. **(Original)** The method of Claim 1, wherein determining at least one modal value based on the selected data subset comprises:  
sorting the selected data subset by value;

processing the sorted data subset to identify one or more modal groups, each modal group comprising one or more instances of a substantially identical value; and  
determining at least one modal value based, at least in part, on the one or more modal groups.

5. **(Original)** The method of Claim 4 further comprising determining a modal count for each modal group, each modal count comprising ~~the~~ a number of instances of the substantially identical value in the associated modal group.

6. **(Original)** The method of Claim 5, wherein determining at least one modal value based, at least in part, on the one or more modal groups comprises:

determining a highest one or more modal counts;  
selecting the substantially identical value from each modal group associated with the highest modal count; and  
assigning each selected substantially identical value to one modal value.

7. **(Currently Amended)** The method of Claim 5, further comprising in response at least in part to each modal count being equal to one, assigning a null value to one modal value in response to each modal count being equal to one.

8. **(Original)** The method of Claim 4, one of the modal groups comprising at least one lowercase string value and at least one mixed-case string value.

9. **(Currently Amended)** The method of Claim 1, wherein determining at least one modal value based on the selected data subset comprises:

selecting one data object from the data subset;  
comparing a value of the data object to a plurality of stored values in a lookup table, each stored value being associated with one modal count;

~~in response, at least in part, to the value of the data object being located in the plurality of stored values,~~ adding one to the associated modal count in response to the value of the data object being located in the plurality of stored values;

selecting ~~the~~ a highest one or more modal counts from the lookup table; and  
assigning each stored value associated with one of the highest modal counts to one modal value.

10. **(Currently Amended)** A computer readable medium containing computer-executable instructions ~~Software~~ for automatically determining at least one modal value of non-numeric data, the computer-executable instructions operable when executed to:

select a data subset from a dataset, the data subset comprising at least a portion of the dataset and including at least one non-numeric value; and

automatically determine at least one modal value based on the selected data subset; and

output the at least one modal value.

11. **(Currently Amended)** The computer readable medium software of Claim 10, wherein ~~the software operable to select~~ selecting the data subset from the dataset comprises ~~software operable to query~~ querying a database.

12. **(Currently Amended)** The computer readable medium software of Claim 10, each value of the data subset comprising one of the following data types:

float;

integer;

currency;

date;

decimal; or

string.

13. **(Currently Amended)** The computer readable medium software of Claim 10, wherein the computer-executable instructions are software operable to determine at least one modal value based on the selected data subset ~~by comprises software~~ operable to:

sorting ~~sort~~ the selected data subset by value;

processing ~~process~~ the sorted data subset to identify one or more modal groups, each modal group comprising one or more instances of a substantially identical value; and

automatically determining ~~determine~~ at least one modal value based, at least in part, on the one or more modal groups.

14. **(Currently Amended)** The computer readable medium software of Claim 13, the computer-executable instructions further operable when executed to determine a modal count for each modal group, each modal count comprising ~~the~~ a number of instances of the substantially identical value in the associated modal group.

15. **(Currently Amended)** The computer readable medium software of Claim 14, wherein the ~~software~~ computer-executable instructions are further operable when executed to determine at least one modal value based, at least in part, on the one or more modal groups ~~by comprises software operable to~~:

determining ~~determine~~ a highest one or more modal counts;

selecting ~~select~~ the substantially identical value from each modal group associated with the highest modal count; and

assigning ~~assign~~ each selected substantially identical value to one modal value.

16. **(Currently Amended)** The computer readable medium software of Claim 14, ~~in response at least in part to each modal count being equal to one, the computer-executable instructions~~ further operable when executed to assign a null value to one modal value in response to each modal count being equal to one.

17. **(Currently Amended)** The computer readable medium ~~software~~ of Claim 13, one of the modal groups comprising at least one lowercase string value and at least one mixed-case string value.

18. **(Currently Amended)** The computer readable medium ~~software~~ of Claim 10, wherein the computer-executable instructions are further ~~software~~ operable when executed to determine at least one modal value based on the selected data subset by ~~comprises software operable to:~~

selecting ~~select~~ one data object from the data subset;

comparing ~~compare~~ a value of the data object to a plurality of stored values in a lookup table, each stored value being associated with one modal count;

~~in response to the value of the data object being located in the plurality of stored values,~~ adding one to the associated modal count in response to the value of the data object being located in the plurality of stored values;

selecting ~~the~~ a highest one or more modal counts from the lookup table; and

assigning each stored value associated with one of the highest modal counts to one modal value.

19. **(Currently Amended)** A system ~~System~~ for automatically determining at least one modal value of non-numeric data, the system comprising ~~comprises:~~

a memory operable to store a data set, the data set comprising a plurality of data objects and each data object comprising a data type and a value; and

one or more processors operable to:

select a data subset from the dataset, the data subset comprising at least a portion of the plurality of data objects and including at least one non-numeric value; ~~and~~

automatically determine at least one modal value based on the selected data subset; and

output the at least one modal value.

20. **(Currently Amended)** The system of Claim 19, wherein the processors are operable to select the data subset from the dataset ~~comprise processors operable to query~~ by querying a database.

21. **(Original)** The system of Claim 19, each data object comprising one of the following data types:

float;  
integer;  
currency;  
date;  
decimal; or  
string.

22. **(Currently Amended)** The system of Claim 19, wherein the processors are operable to determine at least one modal value based on the selected data subset ~~comprise processors operable to~~ by:

sorting ~~sort~~ the selected data subset by value;

processing ~~process~~ the sorted data subset to identify one or more modal groups, each modal group comprising one or more instances of a substantially identical value; and

automatically determining ~~determine~~ at least one modal value based, at least in part, on the one or more modal groups.

23. **(Currently Amended)** The system of Claim 22, the processors further operable to determine a modal count for each modal group, each modal count comprising the a number of instances of the substantially identical value in the associated modal group.

24. **(Currently Amended)** The system of Claim 23, wherein the processors are operable to determine at least one modal value based, at least in part, on the one or more modal groups by ~~comprise processors operable to~~:

determining ~~determine~~ a highest one or more modal counts;  
selecting ~~select~~ the substantially identical value from each modal group  
associated with the highest modal count; and  
assigning ~~assign~~ each selected substantially identical value to one modal value.

25. **(Currently Amended)** The system of Claim 23, ~~in response at least in part to each modal count being equal to one,~~ the processors further operable to assign a null value to one modal value in response to each modal count being equal to one.

26. **(Original)** The system of Claim 22, one of the modal groups comprising at least one lowercase string value and at least one mixed-case string value.

27. **(Currently Amended)** The system of Claim 19, wherein the processors are operable to determine at least one modal value based on the selected data subset by ~~comprise processors operable to:~~  
selecting one data object from the data subset;  
comparing a value of the data object to a plurality of stored values in a lookup table, each stored value being associated with one modal count;  
~~in response to the value of the data object being located in the plurality of stored values,~~ adding one to the associated modal count in response to the value of the data object being located in the plurality of stored values;  
selecting ~~the~~ a highest one or more modal counts from the lookup table; and  
assigning each stored value associated with one of the highest modal counts to one modal value.

28. **(Cancelled)**